

**CLAIMS**

1. An X-ray tube adjusting apparatus which remotely adjusts an X-ray tube, comprising:

storage means which stores, beforehand, an  
5 initial image of a subject to be imaged engraved with a given pattern, said initial image having been imaged by an X-ray inspection apparatus having said X-ray tube with a focal diameter of an electron beam at a target of said X-ray tube adjusted so as to be a predetermined  
10 value and an imaging device;

acquisition means which acquires a test image of said subject to be imaged that is imaged at a time said X-ray inspection apparatus adjusts the focal diameter via a telecommunications line; and

15 presentation means which presents said initial image stored in said storage means and said test image acquired by said acquisition means in a comparable manner.

2. The X-ray tube adjusting apparatus according  
20 to Claim 1, including operation means that manipulates a focus lens, which adjusts a beam diameter of the electron beam in said X-ray tube, via a telecommunications line.

3. An X-ray tube adjusting system which remotely  
25 adjusts an X-ray tube, comprising:

an X-ray inspection apparatus having an X-ray

tube and an imaging device; and

an X-ray tube adjusting apparatus having

storage means which stores, beforehand, an  
initial image of a subject to be imaged engraved with a  
given pattern, said initial image having been imaged by  
said X-ray inspection apparatus with a focal diameter  
of an electron beam at a target of said X-ray tube  
adjusted so as to be a predetermined value,

acquisition means which acquires a test  
image of said subject to be imaged that is imaged at a  
time said X-ray inspection apparatus adjusts the focal  
diameter via a telecommunications line, and

presentation means which presents said  
initial image stored in said storage means and said  
test image acquired by said acquisition means in a  
comparable manner,

and characterized in that said X-ray inspection  
apparatus and said X-ray tube adjusting apparatus are  
connected together via a telecommunications line.

4. An X-ray tube adjusting method for remotely  
adjusting an X-ray tube,

wherein an initial image of a subject to be  
imaged engraved with a given pattern is stored in  
storage means beforehand, said initial image having  
been imaged by an X-ray inspection apparatus having  
said X-ray tube with a focal diameter of an electron

beam at a target of said X-ray tube adjusted so as to be a predetermined value and an imaging device, and comprising:

an acquisition step at which acquisition means  
5 acquires a test image of said subject to be imaged that is imaged at a time said X-ray inspection apparatus adjusts the focal diameter; and

a presentation step at which presentation means presents said initial image stored in said storage  
10 means and said test image acquired by said acquisition means in a comparable manner.

5. The X-ray tube adjusting method according to Claim 4, comprising an operation step at which operation means manipulates a focus lens, which adjusts  
15 a beam diameter of the electron beam in said X-ray tube, via the telecommunications line.

6. An X-ray tube adjusting method,  
wherein an initial image of a subject to be  
imaged engraved with a given pattern is stored in  
20 storage means beforehand in association with identification information of said X-ray tube, said initial image having been imaged by an X-ray inspection apparatus having said X-ray tube with a focal diameter of an electron beam at a target of said X-ray tube  
25 adjusted so as to be a predetermined value and an imaging device, and comprising:

an imaging step at which said X-ray inspection apparatus images a test image of said subject to be imaged at a time parts of said X-ray tube are replaced; and

5           a presentation step at which the initial image associated with the identification information of said X-ray tube is acquired from said storage means and presented in such a manner as to be comparable with said test image.

10           7. The X-ray tube adjusting method according to Claim 6, further comprising:

an alignment adjusting step at which a position of a beam axis of the electron beam in said X-ray tube is adjusted;

15           a set step at which, following said alignment adjusting step and prior to said imaging step, said subject to be imaged is placed at a same position as that when said initial image was imaged; and

20           a focus adjusting step at which referring to the images presented at said presentation step, a focus lens of said X-ray tube is adjusted in such a way that a focal diameter of the electron beam at a target of said X-ray tube becomes said desired state.